



RECEIPT #4  
PATENT  
PC10023A

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Hon. Commissioner of Patents and Trademarks, Washington, D.C. 20231 on this 14 day of December, 1998.

By

Kristina L. Konstas

(Signature of person mailing)

Kristina L. Konstas

(Typed or printed name of person)

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

IN RE APPLICATION OF: J. Timothy Greenamyre et al.

APPLICATION SERIAL NO.: **09/148,973**

: Examiner:

FILING DATE: **September 4, 1998**

: Group Art Unit: **1614**

TITLE: **METHODS OF ADMINISTERING AN :  
AMPA RECEPTOR ANTAGONIST TO  
TREAT DYSKINESIAS ASSOCIATED  
WITH DOPAMINE AGONIST  
THERAPY**

Hon. Commissioner for Patents and Trademarks  
Washington, D.C. 20231

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99 JAN 11 PM 2:06  
GROUP 180

Sir:

**REQUEST UNDER 37 CFR §1.19 TO CORRECT FILING RECEIPT**

Applicants hereby request under 37 CFR §1.19 (and any other applicable section of 37 CFR) that a corrected Filing Receipt be issued in connection with the above-identified application. Applicants request issuance of a corrected Filing Receipt on the basis that the most recently issued Filing Receipt (form PTO-103X) contains the following error:

- 1) it incorrectly spells out the word METHODS in the title.

The most recently issued Filing Receipt erroneously spells out the word METHODS as METODS.

Accordingly, applicants respectfully request a new Filing Receipt without the above error. A copy of the most recently issued Filing Receipt is attached hereto with the changes which should be made indicated in red ink.

Applicants maintain that they did not cause the error in the most recently issued Filing Receipt since the title on the first page of the application as filed correctly spells the word METHODS, and since the Transmittal form filed with the application also correctly spells the word METHODS. A copy of the application's first page and Transmittal form are attached hereto.

Since Applicants did not cause the error on the Filing Receipt, Applicants therefore maintain that no fee is necessary in connection with this Request. However, if any fee is deemed necessary in connection with this Request, such fee may be charged to Deposit Account No. 16-1445.

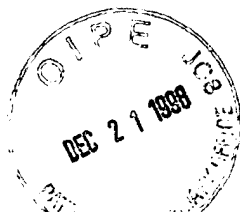
Respectfully submitted,

Date: December 14, 1998

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Patent Dept., 20th Floor  
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Kristina L. Konstas  
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FILING RECEIPT  
CORRECTED



UNITED STATES DEPARTMENT OF COMMERCE  
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APPLICATION NUMBER	FILING DATE	GRP ART UNIT	FIL FEE REC'D	ATTORNEY DOCKET NO.	DRWGS	TOT CL	IND CL
09/148,973	09/04/98	1614	\$920.00	PC10023A	0	8	2

PAUL H GINSBURG  
PFIZER INC PATENT DEPT  
235 EAST 42ND STREET  
NEW YORK NY 10017-5755

Receipt is acknowledged of this nonprovisional Patent Application. It will be considered in its order and you will be notified as to the results of the examination. Be sure to provide the U.S. APPLICATION NUMBER, FILING DATE, NAME OF APPLICANT, and TITLE OF INVENTION when inquiring about this application. Fees transmitted by check or draft are subject to collection. Please verify the accuracy of the data presented on this receipt. If an error is noted on this Filing Receipt, please write to the Application Processing Division's Customer Correction Branch within 10 days of receipt. Please provide a copy of the Filing Receipt with the changes noted thereon.

**Applicant(s)**

J.TIMOTHY GREENAMYRE, ATLANTA, GA; BERTRAND L. CHENARD,  
WATERFORD, CT; WILLARD M. WELCH, MYSTIC, CT; FRANK S.  
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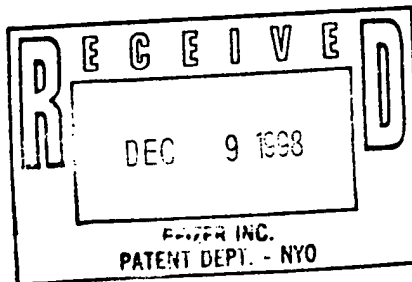
FOREIGN FILING LICENSE GRANTED 09/23/98

**TITLE**

METHODS OF ADMINISTERING AN AMPA RECEPTOR ANTAGONIST TO TREAT  
DYSKINESIAS ASSOCIATED WITH DOPAMINE AGONIST THERAPY

PRELIMINARY CLASS: 514

METHODS



99 JAN 11 PM 2:06  
GROUP 180

DATA ENTRY BY: WASHINGTON, LINDA

TEAM: 06 DATE: 12/02/98

5        METHODS OF ADMINISTERING AN AMPA RECEPTOR ANTAGONIST TO TREAT  
         DYSKINESIAS ASSOCIATED WITH DOPAMINE AGONIST THERAPY

This Application claims the benefit of U.S. Provisional Application No. 60/057,965, filed September 5, 1997.

Background Of The Invention

10        This invention relates to a method of administering an AMPA receptor antagonist to treat dyskinesias in mammals, such as humans, resulting from the use of dopamine agonist therapy. Dopamine agonist therapy, as referred to in the present invention, is generally used in the treatment of a central nervous system disorder such as Parkinson's disease.

         Dyskinesias are involuntary physical movements which may include chorea, tremor, ballism, dystonia, athetosis, myoclonus and tic. Dyskinesias often result from treatment of the physical symptoms of Parkinson's disease. Parkinson's disease is characterized by tremor, rigidity, bradykinesia and postural instability. Such motor abnormalities may be reduced by therapies which increase dopamine receptor stimulation. These therapies include drugs which directly stimulate dopamine receptors (such as bromocriptine) or increase the levels of dopamine (such as L-dopa or drugs which inhibit dopamine metabolism). In the present invention, such therapies which increase dopamine receptor stimulation are referred to generally as dopamine agonist therapy. After a period of chronic administration of dopamine agonist therapy to treat Parkinson's disease, new motor abnormalities may emerge. The motor abnormalities associated with dopamine agonist therapy include choreatic dyskinesias and dystonias. The present invention relates to the treatment of dyskinesias associated with dopamine agonist therapy in the treatment of a central nervous system (CNS) disorder, in particular Parkinson's disease, through the administration of an AMPA receptor antagonist.

         The agent that may be used in accord with the present invention is an antagonist of the AMPA subtype of the glutamate receptor. Glutamate is the principal excitatory neurotransmitter in the central nervous system of mammals. Glutamate synaptic transmission is mediated by several families of receptors including the  $\alpha$ -amino-3-hydroxy-5-methyl-4-isoxazolepropionic acid (AMPA), N-methyl-D-aspartate (NMDA), kainic acid (KA), and metabotropic receptors. The AMPA receptor subtype mediates fast excitatory transmission throughout the brain, including areas involved in movement. By inhibiting the AMPA receptor through administration of an AMPA receptor antagonist, dyskinesias associated with dopamine agonist therapy may be treated in accord with the present invention as described below.

         AMPA receptor antagonists are referred to in several published patents including the following issued United States patents (listed by patent number followed by issue date in parentheses): 5,654,303 (August 5, 1997); 5,639,751 (June 17, 1997); 5,614,532 (March 25, 1997); 5,614,508 (March 25, 1997); 5,606,062 (February 25, 1997); 5,580,877 (December 3,

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**UTILITY  
PATENT APPLICATION  
TRANSMITTAL**

(Only for new nonprovisional applications under 37 C.F.R. § 1.53(b))

Attorney Docket No.

PC10023A

First Named Inventor or Application Identifier

J.T. Greenamyre

Title

METHODS OF ADMINISTERING AN AMPA RECEPTOR  
ANTAGONIST TO TREAT DYSKINESIAS ASSOCIATED WITH  
DOPAMINE AGONIST THERAPY

Express Mail Label No.

EM371532456US

**APPLICATION ELEMENTS**

See MPEP chapter 600 concerning utility patent application contents.

1. ☒ \*Fee Transmittal Form (e.g., PTO/SB/17)  
(Submit an original, and a duplicate for fee processing)
2. ☒ Specification [Total Pages 12]  
(preferred arrangement set forth below)
- Descriptive title of the Invention
  - Cross References to Related Applications
  - Statement Regarding Fed sponsored R&D
  - Reference in Microfiche Appendix
  - Background of the Invention
  - Brief Summary of the Invention
  - Brief Description of the Drawings (if filed)
  - Detailed Description
  - Claim(s)
  - Abstract of the Disclosure
3. ☐ Drawing(s) (35 U.S.C. 11.3) [Total sheets ]
4. ☐ Oath or Declaration [Total pages ]
- a. ☐ Newly executed (original or copy)
  - b. ☐ Copy from a prior application (37 CFR § 1.63(d))  
(for continuation/divisional with Box 17 completed)  
[Note Box 5 below]
  - i. ☐ **DELETION OF INVENTOR(S)**  
Signed statement attached deleting inventor(s) named in the prior application, see 37 C.F.R. §§ 1.63(d)(2) and 1.33(b).
5. ☐ Incorporation By Reference (useable if Box 4b is checked)  
The entire disclosure of the prior application, from which a copy of the oath or declaration is supplied under Box 4b, is considered to be part of the disclosure of the accompanying application and is hereby incorporated by reference therein.

**ADDRESS TO:**Assistant Commissioner for Patents  
Box Patent Application  
Washington, DC 20231

6. ☐ Microfiche Computer Program (Appendix)
7. Nucleotide and/or Amino Acid Sequence Submission  
(if applicable, all necessary)
- a. ☐ Computer Readable Copy
  - b. ☐ Paper Copy (identical to computer copy)
  - c. ☐ Statement verifying identity of above copies

**ACCOMPANYING APPLICATION PARTS**

8. ☐ Assignment Papers (cover sheet & document(s))
9. ☐ 37 C.F.R. § 3.73(b) Statement ☐ Power of Attorney  
(when there is an assignee)
10. ☐ English Translation Document (if applicable)
11. ☐ Information Disclosure Statement (IDS)/PTO-1449 ☐ Copies of IDS Citations
12. ☐ Preliminary Amendment
13. ☒ Return Receipt Postcard (MPEP 503)  
(Should be specifically itemized)
14. ☐ \*Small Entity ☐ Statement filed in prior application.  
Statement(s) Status still proper and desired  
(PTO/SB/09-12)
15. ☐ Certified Copy of Priority Document(s)  
(if foreign priority is claimed)

14. ☒ Other: 1. List of Inventors  
2. Express Mail Certificate of Mailing with  
Label No. EM371532456US

\*NOTE FOR ITEMS 1 & 14: IN ORDER TO BE ENTITLED TO PAY SMALL ENTITY  
FEES, A SMALL ENTITY STATEMENT IS REQUIRED (37 C.F.R. § 1.27), EXCEPT  
IF ONE FILED IN A PRIOR APPLICATION IS RELIED UPON (37 C.F.R. § 1.28).

17. If a CONTINUING APPLICATION, check appropriate box, and supply the requisite information below and in a preliminary amendment:
- ☐ Continuation ☐ Divisional ☐ Continuation-in-part (CIP) of prior application No: \_\_\_\_\_
- Prior application information: Examiner \_\_\_\_\_ Group/Art Unit: \_\_\_\_\_

**18. CORRESPONDENCE ADDRESS**☐ Customer Number or Bar  
Code Label

(Insert Customer No. or Attach bar code label here)

or ☒ Correspondence address below

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Signature	<i>Kristina L. Konstas</i>	Date	09/04/98